

Abstract

Method and circuit for reducing the crest factor

The invention relates to a method for reducing the crest factor, comprising the following method steps:

- (a) IFFT transformation of a data symbol to be transmitted;
- (b) looking for all peak values within a frame of the IFFT-transformed data symbol the amount of which is above a predetermined threshold;
- (c) providing a sample correction function;
- (d) allocating a scaling and phase rotation to the sample correction function according to the amplitude and position of the peak values found;
- (e) generating a correction signal in the frequency domain from a linear combination of rotated and scaled vectors according to the scaling and position determined;
- (f) modifying, particularly reducing the peak value of the data symbol to be transmitted by subtracting the correction signal, and
- (g) IFFT transformation of the peak-value-modified data symbol into the time domain.

The invention also relates to a circuit for reducing the crest factor.

Figure 4